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**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Application Number: 10/534,012
Filing Date: May 05, 2005
Appellant(s): NAUKKARINEN ET AL.

Alfred A. Fressola
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 09/21/09 appealing from the Office action mailed 04/13/09.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

| | | |
|---|---|---|
| 2003/0135327 | Levine et al. | 7-2003 |
| 2002/0140745 | Ellenby et al. | 10-2002 |

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-10 and 14-25, are rejected under 35 U.S.C. 102(e) as being anticipated by Levine et al. (US Patent 2003/0135327).

Regarding claim 1, Levine et al. disclose an apparatus comprising at least one processing component configured to process data (see fig.1, element 110) indicative of the current posture of said apparatus for enabling a posture related presentation of information to a user via an said-output said processing including selecting one of at least two different modes (par.0102) of presentation depending on said current posture of said apparatus (see par.027-030).

Regarding claims 2 and 16, Levine et al. disclose said at least one processing component is configured to present compass information via said output component based on said data (see par.0073).

Regarding claims 3 and 17, Levine et al. disclose further comprising said output component, wherein said output component comprise a 3D display for presenting compass information (see par.0073).

Regarding claims 4 and 18, Levine et al. disclose at least one processing component is configured to present a floating compass on said 3D display based on said data (see par.100).

Regarding claim 5, Levine et al. disclose said at least one processing component is configured to receive said data indicative of the current posture of said apparatus from a 3D magnetometer and, wherein said at least one processing component is configured to use additional measurement data provided by at least one additional sensor for enabling a posture related presentation of information via said output means component (see par.073).

Regarding claim 6, Levine et al. disclose at least one processing component is configured to use said additional measurement data provided by said at least one additional sensor at least for one of the following: adjusting a presentation of information via said output component and filtering signals provided by said 3D magnetometer (see par.106).

Regarding claim 7, Levine et al. disclose further comprising said at least one additional sensor, wherein said at least one additional sensor comprise a 2D or 3D linear accelerometer configured to measure system in three dimensions (see par.106).

Regarding claim 8, Levine et al. disclose further comprising said at least one additional sensor, where in said at leat one additional sensor comprises a 3D angular accelerometer configured to measure the angular acceleration of said mobile electronic system in three dimensions (see par.106).

Regarding claim 9, Levine et al. disclose further comprising said 3D magnetometer, wherein said 3D magnetometer is configured to provide first data indicating a current heading of said mobile electronic system, wherein said 3D angular accelerometer is configured to provide second data indicating a current heading of said mobile electronic system, and wherein said at least one processing component comprises a complementary filter configured to combine said first and said second data indicating a current heading of said mobile electronic system (see par.102).

Regarding claim 10, Levine et al. disclose realizing an inertial navigation system (see par.010).

Regarding claim 14, Levine et al. disclose a user equipment comprising a mobile electronic system (see par.097).

Regarding claim 15, Levine et al. disclose a method for use in a mobile electronic system, said method comprising: performing magnetic measurements in three dimensions in said mobile electronic system; determining data indicative of the current posture of said mobile electronic system based on said performed magnetic measurements; and processing said data for enabling a posture related presentation of information to a user of said mobile electronic system, said processing comprising selecting one of at least two different modes (par.0102) of presentation depending on said current posture of said apparatus (see par.027-030).

Regarding claim 19, Levine et al. disclose performing additional measurements in said mobile electronic system, wherein said processing is based in addition on measurement data resulting in said additional measurements (see par.106).

Regarding claim 20, Levine et al. disclose said processing comprises using said additional measurement data at least for one of the following: adjusting a presentation of information and filtering signals resulting in said performed magnetic measurements (see par.106).

Regarding claim 21, Levine et al. disclose performing said additional measurements comprises measuring the acceleration of said mobile electronic system in three dimensions (see par.106).

Regarding claim 22, Levine et al. disclose performing said additional measurements comprises measuring the angular acceleration of said mobile electronic system in three dimensions (see par.010).

Regarding claim 23, Levine et al. disclose processing comprises combining first data indicating a current heading of said mobile electronic system and second data indicating a current heading of said mobile electronic system by a complementary filtering, which first data is based on said magnetic measurements and which second data is based on said angular acceleration measurement (see par.010).

Regarding claim 24, Levine et al. disclose a mobile electronic system comprising an output component enabling a presentation of information to a user of saidmobile electronic system; - a 3D magnetometer configured to perform magnetic measurements in three dimensions and to provide data indicative of the current posture of said mobile electronic system based on said measurements; and - at least one processing component configured to process said data provided by said 3D magnetometer for enabling a posture related presentation of information via said output component, said

processing including selecting one of at least two different modes (par.0102) of presentation depending on said current posture of said apparatus (see par.027-030).

Regarding claim 25, Levine et al. disclose an apparatus comprising - means for receiving data indicative of the current posture of said apparatus and for processing said data for enabling a posture related presentation of information to a user, said processing including selecting one of at least two different modes (par.0102) of presentation depending on said current posture of said apparatus (see par.027-030); and - means for linking said means for receiving and processing data to means for performing magnetic measurements in three dimensions and for providing said data indicative of the current posture of said apparatus based on said measurements (see fig.1, element 110, par.073).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Levine et al. in view of Ellenby et al. (US Pub. 20020140745).

Regarding claim 11, Levine et al. disclose at least said output component is comprised in a user equipment, wherein at least said 3D magnetometer, wherein said user equipment

and said complementary unit comprise respective connection component rigidly and electrically connecting said complementary.

Levine et al. fail to disclose said 3D magnetometer is comprised in a complementary unit external to said user equipment.

Ellenby et al. disclose said 3D magnetometer is comprised in a complementary unit external to said user equipment (see fig.8-19, element 81, par.0162). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Levine et al. with the above teaching of Ellenby et al. in order to provide an external Magnetometer device ready for integration with the mobile device.

Regarding claims 12-13, the combined Levine et al. disclose a complementary unit for a mobile electronic (see fig. 8-10).

**(10) Response to Argument**

It is asserted by the Examiner that Levine discloses an apparatus comprising at least one processing component to configure to process data (fig. 1, element 110) for used in aircraft, boat or automobile, etc. The processing component detects the aircraft heading and attitude, which way the aircraft is actually pointed, the aircraft is moving slow or not moving, the aircraft position relative to landmarks, i.e., cities, roads, etc., the boat's position relative channels, boating hazards, buoy information, etc. (par.084, 089, 0104). The above movements are considered suggestions of a "current posture" of an apparatus, "current posture" being a term recited in the claims.

Appellant argues that the Examiner interpretation of Levine is incorrect and that paragraph [0102] clearly discloses that only the keyboard is used for selecting the operational mode and not the various sensors that can be implemented in software. Paragraph [0102] discloses: keypad 210 which may be used to select from various operational modes, enter or select waypoints and routes, select map scale, security code, flight and/or tail number, etc., and the operational mode (par.0102, 104) in Levine appears to be related to the functions and capabilities of the device rather than a presentation mode which does not encompass a posture related presentation. The Examiner agrees that paragraph 102 mentions about various operation modes is selected from user input, which is one embodiment; however, Levine discloses a selected operation mode is based on input from filter 200, the filter 200 process is done from circuitry comparison between multiple navigational sources (par.071), which is an embodiment the Examiner relies on. In particular, a boat moves in different bodies of water, these different bodies of water represent different presentation modes depending on the current "posture" of the boat (par.0104, channels, boating hazards and obstructions, mooring details, buoy information, etc. are displayed, or presented depending on the posture of the boat). Furthermore, the navigation device 100 is made low-cost without keypads (par.0115). As another example, Levine discloses a navigation system for use in aircraft for detecting movement, or lack of movement, of the aircraft (current posture) based on a plurality of inputs other than user input such as RF transmission from central station. The aircrafts (including the aircraft which is not moving or slow moving) could be shown visually in different colors (for example, red indicating a warning, or a change in a different presentation mode) (par.089, par.0111).

Regarding dependent claims 11-13 are rejected by virtue of Levine anticipated to independent claims.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Tu X Nguyen/

Primary Examiner, Art Unit 2618

11/17/09

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